



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,849	10/23/2001	Robert Pisani	1141-201	1900
7590	11/14/2005		EXAMINER	
Lieberman & Brandsdorfer, LLC 12221 McDonald Chapel Drive Gaithersburg, MD 20878-2252			LU, KUEN S	
			ART UNIT	PAPER NUMBER
			2167	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,849	PISANI, ROBERT	
	Examiner Kuen S. Lu	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 August 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 23-33 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 23-33 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

1. The Action is responsive to the Applicant's Amendments, filed on August 29, 2005.

It is noted that claims 1-22 were cancelled, 23 was currently amended, 25-33 were amended new and 24 was previously presented.

The Applicant's amendment made to Claim 23 is accepted and the Examiner hereby withdraws the claim rejection under 35 U.S.C. §101 accordingly.

The Examiner also withdraws the rejections of claims 23-24 under 35 U.S.C. § 112, first paragraph.

The Applicant's claim benefit of the filing date of U.S. Application 60/242,889, filed on October 24, 2000, is acknowledged.

Please note Claims 23-33 are pending.

2. As for the Applicant's Remarks on claim rejections, filed on August 29, 2005, has been fully considered by the Examiner, please see discussion in the section ***Response to Arguments***, following the Office Action for Final Rejection (hereafter "the Action").

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the steps for processing and applying the end result of compiling and measuring steps.

5. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Please note in the parent claim 23, a master library is compiled, and a first library is measured against a second library. It is being indefinite whether a data in which library or which library is the data selected in claim 24 for being forwarded after the compiling and measuring steps. The Examiner interprets the data selected is the first library in the Action.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (U.S. Patent 5,812,998, hereafter “Tsutsumi”) and further in view of Singhal (U.S. Patent 6,163,782) and McGee et al. (U.S. Patent 6,496,228, hereafter “McGee”).

As per Claim 23, although Tsutsumi teaches a master library of data from users of a network at Figs. 1 and 2 and col. 6, lines 63-66 by defining a grouped database consisting of a plurality of sub-databases accessible by users of a network, Tsutsumi does not specifically teach “compiling” the master library of data from users of a network.

However, Singhal teaches creating a global view of master collection from a plurality of sub-collection views from the local nodes at col. 5, lines 24-28.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Singhal's reference into Tsutsumi's to create the grouped database by creating a master view consisting all the sub-views of the sub-databases such that search results from the sub-databases could be passed to and organized by a global custodian before being released to the user because by doing so the search criteria could be based on a common, yet global view.

Although Tsutsumi teaches "measuring proximity of a first library to a second library" at col. 15, lines 24-28 by calculating the database structure degree of similarity between the structure of the present sub-database contained in the grouped database and a database structure that has been stored in the database-structure database, neither Tsutsumi nor Sigghal reference teaches specifically to "including assigning a standard of proximity between a ranking of names in said first library, to a ranking of names in said second library as $(1/n)\sum \text{abs}(r_i - s_j)$, where r is a ranking of names in said first library, s is a ranking of names in said second library is a coefficient for a current ranking of names in one of said library, and n is the quantity of names in said libraries".

However, McGee teaches using a similar average deviation formula, $\text{SUM}[i] = \sum_{k,j} \text{ABS}(\text{DCT1}_{k,j}[i] - \text{DCT2}_{k,j}[i])$ in the discrete cosine transform calculation at col. 5, line 62 to col. 6, line 9. The Examiner takes notice that average deviations formulas as described are the basic tools of scientific and technological work and the abstract concept of the formulas are not subject matter patentable.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine teaching of McGee with the Singhal and Tsutsumi references by using a sum-abs standard formula, a popular mathematical equation to quantize the proximity between libraries by calculating standard of difference which well known to an ordinary skilled in the art as further evidenced by the utilization in the McGee reference, to average the summation of rankings of names in the first and second libraries because the formula is a well known generic mathematical formula for calculating standard and the combined teaching would have established the standard of proximity for library ranking quantize-able, credible and meaningful.

As per Claim 24, Tsutsumi further teaches "forwarding data from a library based on a user-defined proximity value" at Fig. 12, step 65 and col. 15, lines 19-43 where a decision is made about a search method based on the shortest search time and high combined degree of similarity.

As per Claim 25, Tsutsumi further teaches "master library includes a collection of individual user libraries" at col. 6, line 63 – col. 7, line 2 by creating a grouped database of a group of sub-databases.

As per Claim 26, Tsutsumi further teaches "user libraries are a collection of lists of said identifying data" at col. 6, line 65 – col. 7, line 2 by identifying and classifying data on a item-by-item basis in each of the sub-databases.

As per Claim 27, Tsutsumi further teaches "the step of determining proximity includes comparing a list of names within said libraries that are common within a predetermined factor" at Figs. 13a-13b and col. 15, lines 44-63 by determining the similarity value of database structures between sub-databases with classification having a common data set and an extracted specific classification range as the predetermined factor.

As per Claim 28, Tsutsumi further teaches scoring the similarity of database structure between sub-databases as previously described in claims 23-24 rejections.

Tsutsumi does not specifically teach "the step of assigning a rank to a sub-library based upon a criterion".

However, Singhal teaches scoring the document by summing the vector inner-product similarity values at col. 6, lines 49-63 and comparing the scores against each other and merging into a single list of documents at col. 7, lines 1-6.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Singhal's reference into Tsutsumi's to create the vector inner-product of the similarity between database-structures of sub-databases because by doing so a ranking could be established to accurately measure the similarity.

As per Claim 29, Tsutsumi further teaches "criteria is selected from the group consisting of: frequency of appearance in said master library, intensity of use by third

parties, cost of use, ease of use, difficulty of use, and frequency of occurrence in selected portions of said master library" at col. 16, lines 23-28 by calculating the degree of similarity based on discrete extracted classifications or based on degree of similarity in well known fuzzy sets with regard to a continuous extracted-classification range.

As per Claim 30, Tsutsumi further teaches "assigning a score to said identifying data based upon proximity of said rank of identifying data in said sub-library to said lists of identifying data in said master library" at col. 16, lines 29-34 by summing up the degrees of similarity of the extracted classifications.

As per Claim 31, Tsutsumi further teaches "score is based upon a quantity of redundancy between said scoring library and said sub-library" at col. 15, line 64 – col. 16, line 4 by calculating the degree of similarity based on the number of times coincidence is achieved.

As per Claim 32, Tsutsumi further teaches "viewing sub-libraries within said master library" at col. 6, lines 50-57 by providing the search data to the user's terminal.

As per Claim 33, Tsutsumi further teaches "searching for said sub-library with a common subject matter to said independent library" at col. 6, lines 50-57 by retrieving user's searching condition.

Response to Arguments

8. The Applicants' arguments filed on August 29, 2005 have been fully considered, for the Examiner's response, please see discussion below:

- a). At Pages 4-5, concerning rejection of claims 23 under 35 U.S.C. § 101 and rejections of claims 23-24 under 35 U.S.C. § 112, first paragraph, the Examiner has accepted the amendment made to claim 23 and withdrawn both rejections as previously described.
- b). At Pages 6-7, concerning rejections of claims 23-24, the Applicant argued that the formula for averaging deviation taught in the McGee reference is not the same formula as presented in the element of claim 23. The Applicant further argued that the McGee reference does not teach the subject matter of measuring proximity between libraries and further alleged the Examiner pieced together the teachings of prior art to render the claimed invention as obvious.

In response to Applicant's above argument, the Examiner respectfully recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tsutsumi reference teaches calculating the database structure degree of similarity between the structure of the present sub-database contained in the

grouped database and a database structure that has been stored in the database-structure database while the McGee reference extensively teaches using formulas for averaging deviation upon which both similarity calculation and proximity measurement heavily depend. It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine teaching of McGee with the Singhal and Tsutsumi references by using a sum-abs standard formula, a popular mathematical equation to quantize the proximity between libraries by calculating standard of difference which well known to an ordinary skilled in the art as further evidenced by the utilization in the McGee reference, to average the summation of rankings of names in the first and second libraries because the formula is a well known generic mathematical formula for calculating standard and the combined teaching would have established the standard of proximity for library ranking quantize-able, credible and meaningful.

9. In light of the forgoing arguments, the 35 U.S.C 103 rejections for Claims 23-33 are hereby sustained.

10. The prior art made of record

- A. U.S. Patent 5,812,998
- B. U.S. Patent 6,163,782
- C. U.S. Patent 6,496,228

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- C. U.S. Patent 6,615,220
- D. U.S. Patent 6,526,417
- E. U.S. Patent 5,778,363
- F. U.S. Patent 6,199,067
- G. U.S. Patent 6,108,057

Conclusions

11. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kuen S Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's supervisor, Jean R. Homere, Esq. can be reached on (571) 272-3780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Kuen S. Lu

Patent Examiner,

November 7, 2005



MELITA ROBINSON
PRIMARY EXAMINER